In The Claims:

1. (Currently Amended) A radiation shielding integrated circuit device comprising:

a x-ray shielding layer for shielding an electronic circuit device from receiving an amount of x-rays greater than the total dose tolerance of the electronic circuit device;

a base coupled to the x-ray shielding layer;

a radiation shielding top coupled to the base;

a radiation shielding bottom coupled to the base; and

the electronic circuit device coupled to the x-ray shielding layer, said x-ray shielding layer obstructing a line-of sight path to said electronic circuit device from a localized external x-ray source, said x-ray shielding layer being implemented as a tub-shaped shielding layer that is composed of an x-ray shielding material which is specifically chosen for attenuating primarily said x-rays, said x-ray shielding material being different from a radiation shielding material from which said radiation shielding top and said radiation shielding bottom are constructed;

wherein the electronic circuit device is shielded from receiving an amount of radiation greater than a total dose tolerance of the electronic circuit device.

2. (Original) The radiation shielding integrated circuit device of claim 1 wherein the radiation shielding top and the x-ray shielding layer are positioned such that there is no line of sight angle at which the x-rays could reach the integrated circuit device.

3. (Original) The radiation shielding integrated circuit device of claim 1 wherein the x-ray shielding layer has a first thickness.

4. (Original) The radiation shielding integrated circuit device of claim 3 wherein the radiation shielding top has a second thickness.

5. (Previously Presented) The radiation shielding integrated circuit device of claim 4 wherein the second thickness is greater than the first thickness because said radiation shielding top is designed to attenuate said radiation and said x-ray shielding layer is designed to attenuate said x-rays.

6. (Original) The radiation shielding integrated circuit device of claim 1 wherein the radiation shielding top comprises a high Z material.

7. (Original) The radiation shielding integrated circuit device of claim 1 wherein the radiation shielding top comprises a high Z material and a low Z material.

8. (Original) The radiation shielding integrated circuit device of claim 1 further comprising a spacing ring coupled to the radiation shielding top and to the base.

9. (Original) The radiation shielding integrated circuit device of claim 8 wherein the spacing ring comprises a high Z material.

10. (Original) The radiation shielding integrated circuit device of claim 8 wherein the spacing ring comprises a low Z material.

11. (Withdrawn) A method of shielding an integrated circuit device comprising:

forming a radiation shielding top and a radiation shielding bottom to shield the integrated circuit device from receiving an amount of radiation greater than a total dose tolerance of the integrated circuit device;

forming a x-ray shielding layer; and

selecting a thickness for the x-ray shielding layer to shield the integrated circuit device from x-rays such that the integrated circuit device receives an amount of x-rays less than the total dose tolerance of the integrated circuit device.

12. (Withdrawn) The method of shielding an integrated circuit device according to claim 11 further comprising:

coupling the integrated circuit device to the x-ray shielding layer; and

coupling the radiation shielding top and the x-ray shielding layer to a base such that there is no line of sight angle at which x-rays could reach the integrated circuit device.

13. (Withdrawn) The method of shielding the integrated circuit device according to claim 11 further comprising forming the radiation shielding top and the radiation shielding bottom from a high Z material.

14. (Withdrawn) A method of shielding an integrated circuit device comprising:

forming a cavity in a base;

forming a radiation shielding coating layer within the cavity in the base;

coupling the integrated circuit device to the radiation shielding coating layer; and

coupling a radiation shielding lid to the integrated circuit device package such that there is no line of sight angle at which x-rays could reach the integrated circuit device.

15. (Withdrawn) The method of shielding the integrated circuit device according to claim 14 further comprising coupling a radiation shielding bottom to the base.

16. (Withdrawn) The method of shielding the integrated circuit device according to claim 15 wherein the radiation shielding top and the radiation shielding bottom shield the integrated circuit device from receiving an amount of ionizing radiation greater than a total dose tolerance for the integrated circuit device.

17. (Withdrawn) The method of shielding the integrated circuit device according to claim 14 wherein the radiation shielding coating layer comprises:

a high Z powder;

a binder; and

an extender.

18. (Withdrawn) The method of shielding the integrated circuit device according to claim 17 wherein the high Z powder is selected such that it will shield the integrated circuit device from x-rays.

19. (Currently Amended) A radiation shielding integrated circuit device comprising:

a base;

a first x-ray shielding layer coupled to the base;

a second x-ray shielding layer coupled to the base;

a first circuit die coupled to the first x-ray shielding layer;

a second circuit die coupled to the second x-ray shielding layer;

a radiation shielding top coupled to the base; and

a radiation shielding bottom coupled to the base;

wherein the thickness of the first x-ray shielding layer is selected to shield the first circuit die from receiving an amount of x-rays greater than the total dose tolerance of the first circuit ~~device~~ die , said x-rays being emitted from a localized external x-ray source;

wherein the thickness of the second radiation shielding [[tub]] layer is selected to shield the second circuit die from receiving an amount of x-rays greater than the total dose tolerance of the second circuit ~~device~~ die, said x-rays being emitted from said localized external x-ray source, said first x-ray shielding layer and said second x-ray shielding layer being implemented as tub-shaped shielding layers that are each composed of an x-ray shielding material which is specifically chosen for attenuating primarily said x-rays, said x-ray shielding material being different from a radiation shielding material from which said radiation shielding top and said radiation shielding bottom are constructed.

20. (Original) The radiation shielding integrated circuit device of claim 19 wherein the radiation shielding top and the first x-ray shielding layer shield the first circuit die from radiation such that there is no line of sight path for the x-rays to the first circuit die; and wherein the radiation shielding bottom and the second x-ray shielding layer shield the second circuit die from radiation such that there is no line of sight path for the x-rays to the second circuit die.

21. (Original) The radiation shielding integrated circuit device of claim 19 further comprising:

a first spacing ring coupled to the radiation shielding top and to the base;

a second spacing ring coupled to the radiation shielding bottom and to the base.

22. (Currently Amended) The radiation shielding integrated circuit device of claim 21 wherein the first spacing ring and the second spacing ring comprise a high Z material.

23. (Original) The radiation shielding integrated circuit device of claim 21 wherein the first spacing ring and second spacing ring comprise a low Z material.

24. (Original) The radiation shielding integrated circuit device of claim 19 wherein the radiation shielding top and the radiation shielding bottom comprise a high Z material.

25. (Original) The radiation shielding integrated circuit device of claim 19 wherein the first electronic circuit device is shielded from receiving an amount of radiation greater than a total dose tolerance of the first electronic circuit device.

26. (Original) The radiation shielding integrated circuit device of claim 19 wherein the second electronic circuit device is shielded from receiving an amount of radiation greater than a total dose tolerance of the second electronic circuit device.